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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,793	05/04/2001	Shyh-Mei F. Ho	SVL920010041US1	1989

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INTERNATIONAL BUSINESS MACHINES CORP  
IP LAW  
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EXAMINER

HA, THANH T

ART UNIT PAPER NUMBER

2126

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/849,793	HO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ha Thanh	2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/12/02</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-12 are pending in the application.

#### ***Specification***

2. The cross reference related to the application cited in the specification must be update (i.e. update the relevant status, with PTO serial numbers or patent numbers where appropriate, on page 1, lines 17-31; page 2, lines 1-7; The entire specification should be so revised).

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duxbury et al. (hereafter Duxbury) (U.S. Patent 5604896), in view of Baisley et al. (hereafter Baisley) (U.S. Patent 6292932 B1).

5. As to claim 1, Duxbury teaches the invention substantially as claimed including a method of processing an application request on an end user

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application and an application server including a mapping support language comprising the steps of:

- a. Initiating the application request on the end user application in a first language with a first application program [col. 1, lines 32-34];
- b. Transmitting the application request to the server and converting the application request from the first language of the first end user application to a form for the mapping support language running on the application server [col. 1, lines 35-37];
- c. Processing said application request on the application server [col. 3, lines 15-18];
- d. Transmitting a response to the application request from the application server to the end user application, and converting the response to the application request from the mapping support language running on the application server to the first language of the first end user application [col. 3, lines 23-27];
- e. Wherein the end user application and the application server have at least one connector therebetween [col. 2, line 36], and the steps of (i) converting the application request from the first language of the first end user application as a source language to the language running on the application server as a target language, and (ii) converting a response to the application request from the language running on the application server as a source language to the first

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language of the first end user application as a target language [col.

8, lines 45-50].

6. Duxbury does not specifically teach:

- a. invoking connector metamodels of respective source language and target mapping support language;
- b. populating the connector metamodels with metamodel data of each of the respective source language and target mapping support language, the metamodel data of the target mapping support language including a map, mapset, and a mapfield; and
- c. converting the source language to the mapping support language.

7. However, Baisley teaches:

- a. A source metamodel [col. 3, line 39] and a target mapping support language [col. 3, 40-41].
- b. the UML model has other information, either as tags or in an external representation [col. 3, lines 48-50] and the metamodel maps data type and attributes in derived data types, maps the derived attributes to aliases of the supertype [col. 4, lines 3-8].
- c. converts UML model to a MOF model [col. 3, line 44].

8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teaching of Duxbury and Baisley because Baisley's

method of using metamodel for the mapping support would provide a predictable and reliable mapping between the original source language and the target language to Duxbury's system.

9. As to claim 2, Duxbury teaches the end user application is a web browser [col. 2, line 16].

10. As to claim 3, Duxbury teaches the end user application is connected to the application server through a web server, and the web server comprises a connector [col. 2, lines 37-39].

11. As to claim 4, Duxbury does not specifically teach the method as set forth in claim 1 wherein the metamodel comprises invocation metamodel data, application domain interface metamodel data, transaction message metamodel data, and type descriptor metamodel data.

12. However, Baisley disclosed repository model typically contain classes, datatypes, and messages [col. 1, lines 31-32], and said that "repositories provide a central place for recording metadata and enable one to store, manage, share and reuse information about data (i.e. metadata) that an enterprise uses" [col. 1 lines 20-23].

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13. It would have been obvious to one of ordinary skill in the art at the time the invention was made, to have combine the teaching of Duxbury's method to Baisley's invention using the motivation set forth in Baisley's teaching.

14. As to claims 5-7, these are transaction processing system claims that correspond to the method claims 1-3. Therefore, they are rejected for the same reason as claims 1-3 above.

15. As to claims 8-10, these are transaction processing system configured and controlled to interact with a client application claims that correspond to the method claims 1-3. Therefore, they are rejected for the same reason as claims 1-3 above.

16. As to claim 11, this is program product claims that correspond to the method claim 1. Duxbury does not specifically teach computer instructions for building a metamodel data repository of source and target language metamodel data. However, Baisley teaches the Unified Modeling Language, or "UML", which may be used to model metamodels, which will later be translated into "MOF" metamodel. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have applied the same concept taught by Baisley and came up with computer instruction for building metamodel data repository to speed up process.

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17. As to claim 12, this is program product claims that correspond to the method claim 4. Therefore, it is rejected for the same reason as claim 4 above.

### ***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Navarre et al. (U.S. Patent 6205482 B1)

Xia (U.S. Patent 6542900 B1)

Mishra (U.S. Patent 6345315 B1)

Marmor (U.S. Patent 6601108 B1)

Regnier et al. (U.S. Patent 6134549)

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ha Thanh whose telephone number is 571-272-7220. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

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Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
MENG AL T. AN  
SUPERVISORY PATENT EXAMINER  
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Thanh Ha  
Examiner  
Art Unit 2126